

*Sedum stenopetalum*

Worm-leaved Stonecrop

by Kathy Lloyd, Montana Native Plant Society

Worm-leaved stonecrop, also known as yellow stonecrop, was collected by Meriwether Lewis in the vicinity of Traveler's Rest near present-day Missoula. It is one of five plant specimens that were collected on July 1 or 2, 1806 that are still in existence today at the Lewis & Clark Herbarium in Philadelphia. The worm-leaved stonecrop specimen is mounted on the same herbarium sheet as another stonecrop, lance-leaved stonecrop, and until recently it was not known that two different species were represented on the same sheet. Frederick Pursh, the German botanist who was commissioned to look at the expedition's plant collection, has two labels on the specimen sheet. One reads, "Valley of Clarks R. Jul. 1st 1806." This label is associated with a packet of loose and fragmented plant material that is attached to the herbarium sheet. The packet contains worm-leaved stonecrop or *Sedum stenopetalum*. The other plant specimens on the sheet have a label written by Pursh that says, "On the naked rocks on the Kooskooskee. Jun: 5th 1806." This label applies to the specimens of lance-leaved stonecrop or *Sedum lanceolatum*. Pursh used both species to write his description of worm-leaved stonecrop in his book *Flora Americae Septentrionalis* and gave it the name *Sedum stenopetalum*. He must have assumed that one plant species was collected twice, once in Idaho on June 5 and again in Montana on July 1. The two species of stonecrop look very similar and it must have been hard to see minute differences in dried plants that had traveled from Idaho and Montana, down the Missouri and Mississippi Rivers to St. Louis and then, eventually, to Philadelphia.

Although the label applied by Fredrick Pursh to the specimen says it was collected on July 1, many Lewis and Clark scholars, including Gary Moulton, believe it was collected on July 2 when Lewis wrote in his journal that he found two species of native clover and gave a description and then continued, "I found several other uncommon plants specemines of which I preserved."

Early July was a very busy time for the expedition as they were making arrangements to split the party into two main groups. Clark would travel to Camp Fortunate to retrieve the items that were cached there and then proceed down the Yellowstone River. Lewis would travel over Lewis & Clark Pass on the "Road to Buffaloe" and make his way to the Marias River in order to ascertain if its source was above 50 degrees north latitude. The captains were hesitant to split the party up, but could see no other way to accomplish their objectives. They had been doing lots of planning and preparations were meticulous. In spite of the anxiety and work to be done, Lewis was able to collect plant specimens and preserve them. They can be found today at the Lewis & Clark Herbarium at the Academy of Natural Sciences in Philadelphia.

On July 3, 1806, as the comrades and friends went separate ways, Lewis wrote, "All arrangements being now compleated for carrying into effect the several schemes we had planed for execution on our return, we saddled our horses and set out I took leave of my worthy friend and companion Capt. Clark and the party that accompanied him. I could

not avoid feeling much concern on this occasion although I hoped this separation was only momentary.”

Worm-leaved stonecrop is a member of the stonecrop (Crassulaceae) family. It is a perennial with alternate, linear leaves that come to a sharp point at the end and are often keeled or concave in shape. They have a succulent, fleshy appearance, as do the leaves of many members of the stonecrop family. The succulent, waxy leaves of many species help the plants retain water and adapt to very dry conditions. It is not unusual for plants to remain dormant until enough moisture is present to allow them to grow and flower. Some of the leaves of worm-leaved stonecrop may fall off by the time the plant flowers but others remain on the stems with a withered appearance. The plant may send up sterile shoots without flowers and the upper stem leaves may contain small bulbil-like modified flowers. The plant is seldom over 12 inches in height and the name *Sedum* is believed to come from the Latin *sedeo*, meaning to sit, a reference to the low stature of many species. The flowers are yellow and have a star-like appearance. They are arranged in cymes and the flower at the very end of the flowering stem blooms first. *Stenopetalum* means narrow-petaled.

Worm-leaved stonecrop grows from British Columbia to California and east as far as western Montana. It is rarely found in Wyoming. Habitats as diverse as sagebrush deserts, ponderosa pine woodlands, rocky slopes and ridges, and subalpine areas can support worm-leaved stonecrop. It is very drought-resistant and is a good choice for xeric landscaping and rock gardens. The common name stonecrop refers to the fact that many species of *Sedum* can grow on rocky areas with very little soil development.

The succulent leaves of many species of *Sedum* have been used for food as salad or cooked vegetables, and the roots were also occasionally used as a food source. Medicinally, species of *Sedum* have been used for mouth sores, as a laxative, for stomachache, tuberculosis and to aid in the healing of wounds. The Okanagan-Colville Indians used worm-leaved stonecrop to treat venereal disease. They made a tea from the whole plant and drank it to help relieve their symptoms.

Although today we don't need to rely on worm-leaved stonecrop for medical purposes, it is a pleasure to know that one of the plant species collected by Meriwether Lewis 200 years ago can still be found in Montana. Preserving our natural heritage and the habitats needed by native plant species is one way to insure this legacy is handed down to future generations.